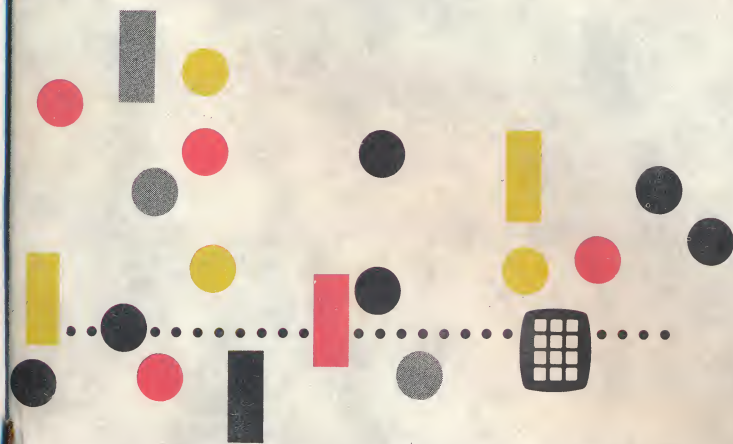
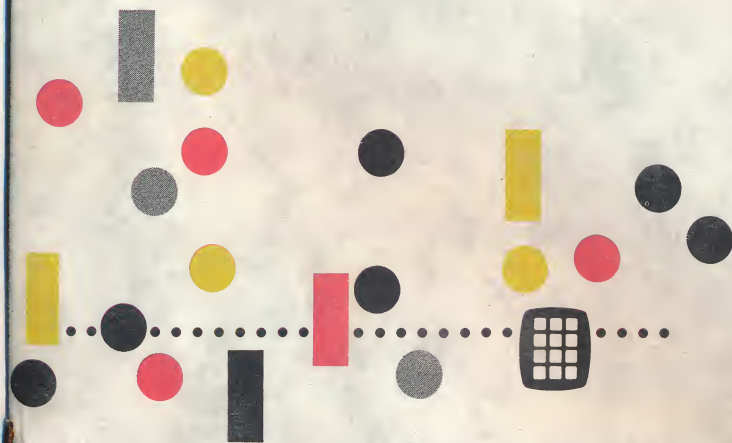


***DATA COMMUNICATIONS FOR BUSINESS***  
*...the challenge of an accelerating complexity*



# ***DATA COMMUNICATIONS FOR BUSINESS***

*...the challenge of an accelerating complexity*



*DATA COMMUNICATIONS FOR BUSINESS...*



# THE TOUCH TONE® TELEPHONE

*...a common denominator for data communications*

In the accelerating complexity of the American economy, the volume of information is exploding beyond management's capacity to assimilate it readily.

Management *can* cope with the burgeoning mass of information—if the computer can *get* the information, *process* it, then *communicate* the substance of the information to those who must act upon it.

“COMMUNICATIONS,” then, is the key word. And the Bell System is the key name in data communications.

The Touch-Tone® telephone is a good example of what the Bell System has to offer both worlds—top managements everywhere and the computer industry. This telephone—which eventually will be the standard instrument throughout America—speaks computer “language.” It can help provide two-way communications to many types of computers and business machines. Whether it's a small company buying time from a distant computer, or the branch office of a large corporation phoning their centralized computer service—the Touch-Tone telephone is the universal way to bring the power of the computer into the race against time and complexity.

***BUSINESS POTENTIAL***    *The Touch-Tone telephone offers data communications*



*to a total market . . . businesses of every type and any size.*

In line, staff and top management areas, a Touch-Tone telephone can put you in contact with a computer whose services are as broad as the variety of the data itself. Imagine, for example, the comptroller of a company—large or small—who wishes an instant check of his company's cash position. His secretary simply calls the bank's computer. She touches in the corporation account number and then presses a code which asks, "Balance, please." And the bank's computer answers by voice, giving the current account balance.

Suppose you're considering a new mechanized ordering system. A Touch-Tone instrument in any branch office can be used to call a business machine—say a teletypewriter—in the central warehouse, and place orders instantly. First, a Touch-Tone telephone with card dialer is used to call the business machine, which is set up with order forms. Another card prints the customer's account number on the order form. Product cards go right into the card dialer to specify individual products on the form. With each product, the salesman or secretary records the quantity of the item ordered by tapping out the quantity on the Touch-Tone telephone keyboard. From this point on, shipping, inventory control and billing are handled automatically.

The highest development in data communications will be reached when a computer can effectively serve top management with business information systems—and the Bell System has worked with this end in mind. It is now feasible for management to query a remote computer for quick, precise information that can assist in decision-making. One simple illustration is the need to know production capability in relation to overtime cost, before a commitment can be made by company management. Using a regular TWX line, the secretary could transmit the questions in machine code by teletypewriter to a distant computer. The computer is already programmed with the time and material factors of the production units. It is regularly updated with inventory checks and back-ordered production. This computer responds in seconds with a written answerback on the teletypewriter that tells the management their production capacity, the date production could be completed at normal working schedules and the added cost to produce by the specified date.

Change the type of problem, the type of management, or the type of information; two constants remain—the value of the computer to management, and the capability the Bell System provides in data communications for *every* business.

## **ESS**—*FOR DATA SERVICE*

The latest example of the Bell System's intent to pace the field of communications for business information is "ESS"—Electronic Switching System for data service.

This will be a modern, common-control data switching system . . . a nationwide communications network with automatic station operation that will give fast, flexible data communications for business. This large information switching system will work on a "store and forward" basis to handle sizeable volumes of data—and other messages as well—to and from multiple locations.

Here are some of the planned features of this service, which is being designed to challenge *your* imagination:



Versatile—flexible



Ready for business growth



Error control



**Prearranged alternate delivery**



**Message retrieval**



**Automatic insertion of date, time and message number**



**Mnemonic addressing**



**Precedence—urgent, rush, normal and deferred**



**Speed and code conversion**



**Status and load print-outs**



**Batched delivery**



**Connection to business machines**



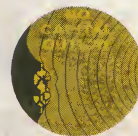
**Switching equipment on telephone company premises**



**Common switching with individual privacy**



**Switching programmed by Bell System**



**No capital outlay**



**Reliable service**

## *THE BELL SYSTEM AND YOUR COMPANY'S PROGRESS*

It's important to bring the Bell System into your planning in the formative stages. Bell System Communications Consultants are ready to help business apply the best of data communication services to the fine art of management.

Many of our Communications Consultants have been trained at the Bell System data "University" in Cooperstown, N.Y.—and each is ready to focus the knowledge and facilities of the Bell System toward your data needs. There's an advantage in consulting us early, too . . . because effective communications is the key to your company's ability to manage the information explosion.



**Bell System**

American Telephone and Telegraph and Associated Companies